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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,741	07/18/2000	Thomas M. Hartnett	07206-118001	8640
51503	7590	04/03/2006	EXAMINER	
RAYTHEON COMPANY c/o DALY, CROWLEY, MOFFORD & DURKEE, LLP 354A TURNPIKE STREET SUITE 301A CANTON, MA 02021-2714			HOFFMANN, JOHN M	
			ART UNIT	PAPER NUMBER
			1731	
DATE MAILED: 04/03/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/618,741	HARTNETT ET AL.	
	Examiner	Art Unit	
	John Hoffmann	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 February 2006.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 8,10-13 and 32-57 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 8,10-13 and 32-57 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

<p>1) <input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____</p>	<p>4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p>
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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/06/2006 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 10-11, 13 and 32-57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Throughout the claims "predetermined (temperature)" reads on a nebulous mental step conducted prior to the manipulative steps of the claimed process, hence rendering the present process claim unclear in meaning in scope. If applicant wishes to patent detail controls over the recited process, the process steps must be positively recited. See Seagram & Sons Inc. vs Marzall, 84 USPQ 180.

The term "continuously" makes the claims indefinite. Examiner notes that the present application does not set forth a definition for the term; and there is no indication that the term "continuously" should be limited to the specific (continuous) embodiments in the specification. Secondly, Examiner is not aware of any art-recognized meaning for the term. Thus it is deemed that the "plain meaning" of the term is appropriate.

From MPEP 2111.01:

Plain Meaning

I. THE WORDS OF A CLAIM MUST BE GIVEN THEIR "PLAIN MEANING" UNLESS THEY ARE DEFINED IN THE SPECIFICATION

While the claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allow. *In re American Academy of Science Tech Center, **>367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004)* (The USPTO uses a different standard for construing claims than that used by district courts; during examination the USPTO must give claims their broadest reasonable interpretation.). This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification.

As far as Examiner can tell, the plain meaning of "continuously" as it relates to the steps is that they occur uninterrupted in time. Examiner notes that any step of introducing, mixing, maintaining, etc. will occur over some period of time, be it an hour, a minute or 5 milliseconds. The step will be continuous for at least some brief interval – even in a batch process. One of ordinary skill would not be able to ascertain what sort of cessation to be an interruption and what constitutes a division between two similar steps. For example, claim 39 requires "continuously mixing" – it is unclear whether one can avoid infringement merely by interrupting the mixing for 10 seconds. To examiner that seems to be unreasonable, but any other interpretation would seem to require examiner to give no weight whatsoever to the term.

See Allen Eng'g Corp. V. Bartell Indus. Inc. 299 F 3d 1336, 1348, 63 USPQ2d 1769, 1775 (Fed. Cir. 2002) (quoting Personalized Media Communications, LLC v. Int'l Trade Comm'n, 161 F.3d 696, 705, 48 USPQ2d 1880, 1888 (Fed. Cir. 1998)) ("In determining whether the claim is sufficiently definite, we must analyze whether "one skilled in the art would understand the bounds of the claim when read in light of the specification."") See also, Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1375, 60 USPQ2d 1272, 1276 (Fed. Cir. 2001) (citation omitted) (patent claims must be "sufficiently precise to permit a potential competitor to determine whether or not he is infringing").

Since a potential competitor would not be able to ascertain what sort of mixing, introducing, etc. are continuous and which ones are not, the claims are not sufficiently precise to determine whether or not he is infringing and thus the claims are indefinite.

Double Patenting

Applicant is advised that should claim 33 be found allowable, claim 38 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

As noted above Examiner cannot ascertain any importance to the terms "continuously" and "predetermined". Also, everything inherently has a temperature. Since each of the independent claims only differ by such limitations, (assuming that the Examiner is correct that the terms do not differentiate between the claims) the

independent claims are substantial duplicates of each other and thus will be objected to if found to be otherwise allowable.

Claim Objections

Claims 32, 34, 36, 38-39, 41, 47, 53 and 57 are objected to because of the following informalities:

From MPEP 608.01 Form of Claims

Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation, 37 CFR 1.75(i).

There may be plural indentations to further segregate subcombinations or related steps.

Appropriate correction is required.

For example claim 32, part c has substeps of maintaining, passing and converting that lack line indentation. All of the other step c)'s lack similar indents. Examiner presumes the substeps are required steps.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8, 10-11, 13 and 32-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maguire 4686070 alone, or in view of Serpek 1030929.

See how the reference were applied in prior Office actions.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maguire and optionally in view of Serpek as applied to claim 11 above, and further in view of Abstract of JP403023269A or Dodds 5925584.

See how these references were applied in the previous rejections – for example that of April 6, 2003.

Response to Arguments

Applicant's arguments filed 6 February 2006 have been fully considered but they are not persuasive.

Applicant's request for an interview is tentatively granted. Applicant should now indicate a date and time.

It is argued that Maguire teaches a two-step temperature process, and does not teach making ALON with a constant temperature process. The relevance of this argument is not understood. The present claims are comprising in nature and thus are open other steps, for example another step at another temperature. Applicant has not pointed to any specific claim limitation that precludes the combination as set forth in the rejection. Moreover, each of the independent claims has at least three steps, not "one step" as argued by Applicant.

Applicant's arguments refers to a "two-step temperature process" and a "one-step temperature process". Examiner could find no mention of such a process in any claim, nor does examiner know what a "temperature process" is or is not. Since Examiner does not understand what these terms mean, the arguments are not persuasive.

It is argued that nothing in Maguire teaches or suggests the temperature is constant. The claims do not require and duration during which the temperature is constant – it could be for any time period – no matter how short. Maguire's use of a

temperature readily conveys that a temperature is substantially constant for some non-zero time period.

Applicant's arguments regarding In re Dilnot have been considered – but the arguments do not point out how the present invention is anything but the routine and obvious application of the principles pointed out in In re Dilnot.

As to the argument that Applicants recognized that with a proper temperature, a single temperature process is possible. Again, examiner fails to see how applicant's invention is anything but Maguire's process converted from batch to continuous processing.

As to the assertion that Applicant's process yields an unexpected result: it is noted that applicants bear the burden of establishing that the claimed subject matter in fact imparts unexpected properties. See In re Klosak, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972). Moreover, applicant have not met their burden of establishing that the reported bonding results would have been truly unexpected to a person of ordinary skill in the art.

Applicant argues that Applicant does not use the same reactants and temperatures as the prior art. This unsupported assertion is not convincing – because there is no indication of what reactant and temperature is not in the prior art.

The arguments regarding "proper temperature" are deemed irrelevant because the claims do not require a "proper temperature" and because examiner has no idea what such is.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John Hoffmann
Primary Examiner
Art Unit 1731
3-30-06

JMH